

Application No. 10/088,569
Amtd. dated 04-26-06
Reply to Office Action of 10-27-05

2

Amendments to the Claims:

1. to 11. (Cancelled)

12. (Currently amended) A method of using a gene encoding a serine-threonine kinase (STK) of a strain of *Chlamydia* and having SEQ ID NO: 1 or a fragment of said STK that generates a STK specific immune response, to produce an immune response in a host, which comprises:

isolating said gene,

operatively linking said gene to a human cytomegalovirus major immediate-early promoter-enhancer region contained within plasmid pcDNA3 at least one control sequence to produce a plasmid non-replicating vector, said cytomegalovirus promoter control sequence directing expression of said STK or fragment thereof when introduced to a host into a host to produce an immune response to said STK or fragment thereof, and

introducing said vector into a host intramuscularly or intranasally.

13. to 16. (Cancelled)

17. (Original) The method of claim 12 wherein said strain of *Chlamydia* is a strain producing chlamydial infections of the lung.

18. (Original) The method of claim 12 wherein said strain of *Chlamydia* is a strain of *Chlamydia trachomatis*.

19. to 20. (Cancelled)

21. (Original) The method of claim 12 wherein said host is a human host.

22. (Currently amended) A method of producing a vaccine for protection of a host against disease caused by infection with a strain of *Chlamydia*, which comprises:

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3

isolating a nucleotide sequence encoding a serine-threonine kinase (STK) of a strain of *Chlamydia* having SEQ ID NO:1 or a fragment of said STK that generates a STK-specific immune response,

operatively linking said nucleotide sequence to a human cytomegalovirus major immediate-early promoter-enhancer region contained within pcDNA3 at least one control sequence to produce a plasmid non-replicating vector, said cytomegalovirus promoter the control sequence directing expression of said STK or fragment thereof when introduced to a host to produce an immune response to said STK or fragment thereof, and

formulating said vector as a vaccine for in vivo intranasal or intramuscular administration to a host.

23. (Original) A vaccine produced by a method as claimed in claim 22.